

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

Claims 1-21 (Canceled).

22. (New) An OFDM transmission apparatus providing a transmission period in which communication control information and user data are transmitted at the same time using a plurality of subcarriers forming an OFDM signal, said OFDM transmission apparatus comprising:

an OFDM signal former that allocates: (i) the same communication control information to each of specific subcarriers of the OFDM signal and (ii) the user data to subcarriers of the OFDM signal other than said specific subcarriers; and

a transmitter that transmits the OFDM signal formed in the OFDM signal former.

23. (New) The OFDM transmission apparatus according to claim 22, wherein one of the specific subcarriers to which the communication control information is allocated has an angular frequency of zero.

24. (New) The OFDM transmission apparatus according to claim 22, wherein the communication control information includes a packet signal.

25. (New) A communication terminal apparatus comprising the OFDM transmission apparatus of claim 22.

26. (New) A base station apparatus comprising the OFDM transmission apparatus of claim 22.

27. (New) An OFDM reception apparatus comprising:
a receiver that receives an OFDM signal formed by a plurality of subcarriers that are communicated at the same time, wherein: (i) the same communication control information is allocated to each of specific subcarriers of the OFDM signal and (ii) user data is allocated to subcarriers of the OFDM signal other than said specific subcarriers;

an extractor that extracts the communication control information from one of the specific subcarriers of the received OFDM signal; and

a determiner that determines, based on reception levels of the specific subcarriers, from which specific subcarrier the

communication control information is extracted for use in communication control.

28. (New) The OFDM reception apparatus according to claim 27, wherein:

the communication control information is allocated to a first subcarrier of angular frequency 0 and a second subcarrier different from said first subcarrier, within the OFDM signal; and

the determiner compares the reception levels of the first and second subcarriers and selects the one having the higher reception level as the specific subcarrier from which the communication control information is extracted.

29. (New) The OFDM reception apparatus according to claim 28, wherein the reception levels of the first and second subcarriers are averages computed by an averager.

30. (New) The OFDM reception apparatus according to claim 28, wherein the extractor comprises:

a DC offset detector that averages reception signals of the first subcarrier, after Fourier transform processing, over a selected period to detect a DC offset;

a storage that stores the detected DC offset; and

a subtractor that subtracts the stored DC offset from a reception signal of the first subcarrier to produce the first subcarrier reception level.

31. (New) The OFDM reception apparatus according to claim 27, wherein the communication control information includes a packet signal.

32. (New) A communication terminal apparatus comprising the OFDM reception apparatus of claim 27.

33. (New) A base station apparatus comprising the OFDM reception apparatus of claim 27.

34. (New) An OFDM reception apparatus comprising:
a receiver that receives an OFDM signal formed by a plurality of subcarriers that are communicated at the same time, wherein: (i) the same communication control information is allocated to each of a first subcarrier of angular frequency 0 and a second subcarrier different from said first subcarrier, within the OFDM signal and (ii) user data is allocated to subcarriers of the OFDM signal other than said first and second subcarriers;

an extractor that extracts the communication control information from one or both of the first and second subcarriers of the received OFDM signal; and

a determiner that determines how the communication control information will be extracted from the first and second subcarriers based on their respective reception qualities.

35. (New) The OFDM reception apparatus of claim 34, wherein the determiner compares determination errors of the first subcarrier and determination errors of the second subcarrier and selects the one having fewer determination errors as the specific subcarrier from which the communication control information is extracted for use in communication control.

36. (New) The OFDM reception apparatus according to claim 34, wherein the determiner comprises:

a first comparator that compares reception levels of the first and second subcarriers to produce a difference value; and

a second comparator that compares the difference value between the reception levels of the first and second subcarriers to a predetermined value, wherein

when the difference value is less than the predetermined value, the determiner selects the second subcarrier as the

specific subcarrier from which the communication control information is extracted for use in communication control.

37. (New) The OFDM reception apparatus according to claim 34, wherein the determiner comprises a combiner that adds signals of the first subcarrier and signals of the second subcarrier to extract the communication control information for use in communication control.

38. (New) The OFDM reception apparatus according to claim 34, wherein the determiner comprises a maximum ratio combiner that performs weighting processing on signals of the first subcarrier and on signals of the second subcarrier in accordance with reception levels of the subcarriers and adds the weighted signals of the first and second subcarriers to extract the communication control information for use in communication control.

39. (New) An OFDM transmission method providing a transmission period in which communication control information and user data are transmitted at the same time using a plurality of subcarriers forming an OFDM signal, said OFDM transmission method comprising:

allocating: (i) the same communication control information to each of specific subcarriers of the OFDM signal and (ii) the user data to subcarriers of the OFDM signal other than said specific subcarriers; and
transmitting the OFDM signal.

40. (New) The OFDM transmission method according to claim 39, wherein one of the specific subcarriers to which the communication control information is allocated has an angular frequency of zero.

41. (New) The OFDM transmission method according to claim 39, wherein the communication control information includes a packet signal.

42. (New) An OFDM reception method comprising:
receiving an OFDM signal formed by a plurality of subcarriers that are communicated at the same time, wherein: (i) the same communication control information is allocated to each of specific subcarriers of the OFDM signal and (ii) user data is allocated to subcarriers of the OFDM signal other than said specific subcarriers;

selecting, based on reception levels of the specific subcarriers, from which specific subcarrier the communication control information is to be extracted for use in communication control; and

extracting the communication control information from the selected specific subcarrier of the received OFDM signal.

43. (New) The OFDM reception method according to claim 42, wherein:

the communication control information is allocated to a first subcarrier of angular frequency 0 and a second subcarrier different from said first subcarrier, within the OFDM signal; and

the selecting operation includes comparing the reception levels of the first and second subcarriers and selecting the one having the higher reception level as the specific subcarrier from which the communication control information is extracted.